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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/753,109

01/07/2004

Masaki Yamazaki

HGM-123-A

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03/16/2005

CARRIER BLACKMAN AND ASSOCIATES

24101 NOVI ROAD

SUITE 100

NOVI, MI 48375

EXAMINER

KWOK, HELEN C

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/753,109

Applicant(s)

YAMAZAKI ET AL.

Examiner

Helen C. Kwok

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-8 is/are allowed.
- 6) ☒ Claim(s) 1-3, 9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-3 and 9-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, the phrase "the front wheels" lacks antecedent basis. In line 8, the phrase "the rear wheels" lacks antecedent basis. In line 17, the phrase "the wheel rotational speed sensor" is vague. Is this referring to "the front wheel rotational speed sensor" or "the rear wheel rotational speed sensor"? In line 19, the phrase "the wheel rotational speed sensor" is vague. Is this referring to "the front wheel rotational speed sensor" or "the rear wheel rotational speed sensor"?

In claim 2, line 3, the phrase "the wheel rotational speed sensor" is vague. Is this referring to "the front wheel rotational speed sensor" or "the rear wheel rotational speed sensor"? in line 6, the phrase "the wheel rotational speed sensor" is vague. Is this referring to "the front wheel rotational speed sensor" or "the rear wheel rotational speed sensor"?

In claim 9, line 5, the phrase "the wheels" lacks antecedent basis.

In claim 10, line 6, the phrase "the wheels" lacks antecedent basis.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,466,855 (Yamaguchi) in view of U.S. Patent 6,526,367 (Yamamoto et al.).

With regards to claims 1 and 3, Yamaguchi discloses a vehicle speed apparatus comprising, as illustrated in Figures 1-2, front wheel rotational sensors 52FL, 52FR for detecting a rotational speed V_{fl}, V_{fr} of at least one of the front wheels of the vehicle (column 4, lines 59-62), rear wheel rotational sensors 52RL, 52RR for detecting a rotational speed V_{rl}, V_{rr} of at least one of the rear wheels of the vehicle (column 4, lines 59-62); a vehicle speed calculator 50 for calculating a vehicle speed V_b based on a selected output from the front or rear wheel rotational sensor (column 5, lines 46-60); a drive mode sensor 18 for detecting whether the vehicle is traveling in a 2WD mode or in a 4WD mode by a the position of the switch 26 (column 4, lines 11-27) wherein the vehicle speed calculator includes a first vehicle speed calculating unit for calculating the vehicle speed based on the selected output from the wheel rotational speed sensor and a first predetermined condition (as illustrated in Figure 2, S30 illustrates a unit which is part of the ECU 50 as a calculating unit for calculating the vehicle speed based on a

2WD mode) and a second vehicle speed calculating unit for calculating the vehicle speed based on the selected output from the wheel rotational speed sensor and a second predetermined condition (as illustrated in Figure 2, S40 illustrates a unit which is part of the ECU 50 as a calculating unit for calculating the vehicle speed based on a 4WD mode). (See, column 4, line 1 to column 9, line 43). Moreover, as disclosed in column 11, line 53 to column 12, line 8 of Yamaguchi, the reference suggests separate components or circuitries for performing various different specific computations. Hence, even if one does not explicitly observe that the vehicle speed calculator comprises a first calculating unit and a second calculating unit based on the reasons as set forth in the rejection noted above, it is well known as mentioned in the above-mentioned section of the specification (column 11, line 53 to column 12, line 8), one can readily recognize that a plurality of separate components can be used to serve and perform the same operations and functions. The only difference between the prior art and the claimed invention is a speed display mechanism for displaying the vehicle speed calculated by the vehicle speed calculator. Although Yamaguchi does not explicitly illustrate or disclose a display mechanism for displaying the vehicle speed, it does suggest the use of a computer (column 11, line 67) in such a way that an artisan in the art would recognize that a computer usually includes a monitor for displaying information. Hence, Yamaguchi inherently suggests a display mechanism. Just in case Applicant does not agree with the Examiner about Yamaguchi inherently teaches a display mechanism, Yamamoto et al. discloses a wheel speed detecting apparatus comprising, as illustrated in Figures 1-2, a display for displaying vehicle speed calculated from rotational speed of

wheels of a vehicle measured by wheel rotational sensors 10, 10x, 10y, 10z. (See, column 2, lines 6-67). It would have been obvious to a person of ordinary skills in the art at the time of invention to have readily recognize the advantages and desirability of employing a display as suggested by Yamamoto et al. to the apparatus of Yamaguchi to provide a visual output to the operator the vehicle speed computed from the wheel speeds and other information that can be useful to the operation of the vehicle onto the display. (See, column 2, lines 39-44 of Yamamoto et al.).

With regards to claim 9, the claim is commensurate in scope with the above claims and is rejected for the same reasons as set forth above.

Allowable Subject Matter

5. Claims 4-8 are allowed over the prior art of record.
6. Claim 2 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
7. Claim 10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Response to Amendment

8. Applicant's arguments with respect to claims 1-10 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

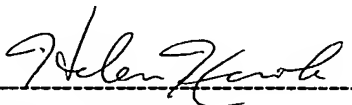
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen C. Kwok whose telephone number is (571) 272-2197. The examiner can normally be reached on 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E. Williams can be reached on (571) 272-2208. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Helen C. Kwok
Art Unit 2856

hck
March 8, 2005